



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,681	12/10/2001	Yoshimichi Kudo	16869S-038800US	9306
20350	7590	07/10/2006	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP			PAN, JOSEPH T	
TWO EMBARCADERO CENTER				
EIGHTH FLOOR			ART UNIT	
SAN FRANCISCO, CA 94111-3834			PAPER NUMBER	
			2135	

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,681

Applicant(s)

KUDO ET AL.

Examiner

Joseph Pan

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/10/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's response filed on May 2, 2006 has been carefully considered. Claims 1-19 have been cancelled. New claims 20-30 have been added. Claims 20-30 are pending.

Claim Objections

2. Claims 20, 24-25, 27, 29 objected to because of the following informalities: Claims 20, 24-25, 27, 29 contain the limitation 'disabled' or 'playback-disabled' regarding the stream data. However, the claim limitation 'disabled' or 'playback-disabled' is not found in the specification. The specification discloses 'deleted' regarding the stream data. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Traw et al. (U.S. Patent No. 6,542,610 B2), hereinafter "Traw", in view of Severt et al. (U.S. Patent No. 5,602,750), hereinafter "Severt"

Referring to claim 20:

i. Traw teaches:

A streaming data playback apparatus comprising:

a playback circuit which reproduces streaming data from a recording medium (see figure 6; and column 3, lines 42-46; and column 6, lines 40-46 of Traw);

an interface circuit which performs a scramble process on the streaming data reproduced by the playback circuit and adds copy control information to the scrambled streaming data for transmission (see figure 6, element 606 'Channel Cipher Subsystem'; column 10, lines 11-23; column 3, lines 31-32 'CGMS'; and column 5, lines 27-30 of Traw);

wherein the interface circuit exchanges key information used for the scramble process and a descramble process with a destination apparatus for the streaming data by performing an authentication process with the destination apparatus (see figure 6, element 604 'Authentication and Key Exchange Subsystem'; and column 11, lines 1-9 of Traw); and

when transmitting the streaming data, the interface circuit changes the copy control information added to the scrambled streaming data depending on a first case that the streaming data remains stored in the recording medium for playback after the streaming data transmission and a second case that the streaming data on the recording medium is to be disabled from playback after transmission (see column 10, lines 11-23 of Traw).

However, Traw does not specifically mention disabling the streaming data on the recording medium after transmission.

ii. Severt discloses an apparatus for providing results of electrical tests correlated with location information, where the results file manager deletes the data from the current result location (see column 10, lines 49-56 of Severt).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Severt into the system of Traw to disable the streaming data on the recording medium after transmission.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Severt into the system of Traw to disable the streaming data on the recording medium after transmission, because multimedia application may include materials such as audio, video or graphic elements that are subject to copy-right or contractual restrictions as to use, distribution or the like (see column 1, lines 23-26 of Traw).

Referring to claims 21, 30:

Traw and Severt teach the claimed subject matter: A stream data playback apparatus (see claim 20 above). Traw further discloses the copy control information (see column 3, lines 31-32; column 5, lines 27-30; and column 10, lines 11-23 of Traw).

Referring to claim 22:

Traw and Severt teach the claimed subject matter: A stream data playback apparatus (see claim 20 above). Traw further discloses transmitting a command to the destination apparatus (see figure 1(a), 'Establish full control and content channels'; figure 3(a), element 304; and figure 6, 'Control Channel Commands' of Traw).

Referring to claim 23:

Traw and Severt teach the claimed subject matter: A stream data playback apparatus (see claim 20 above). Traw further discloses the hard disk drive (see column 1, lines 37-39 of Traw).

Referring to claim 24:

i. Traw teaches:

A streaming data playback apparatus comprising:

a playback circuit which reproduces streaming data from a recording medium (see figure 6; and column 3, lines 42-46; and column 6, lines 40-46 of Traw);

an interface circuit which performs a scramble process on the streaming data reproduced by the playback circuit and adds copy control information to the scrambled streaming data for transmission (see figure 6, element 606 'Channel Cipher Subsystem'; column 10, lines 11-23; column 3, lines 31-32 'CGMS'; and column 5, lines 27-30 of Traw);

wherein the interface circuit exchanges key information used for the scramble process and a descramble process with a destination apparatus of the streaming data, by performing an authentication process with the destination apparatus (see figure 6, element 604 'Authentication and Key Exchange Subsystem'; and column 11, lines 1-9 of Traw); and

during transmission of the streaming data, the interface circuit refuses to perform an authentication process with any apparatus other than the destination apparatus, and after the transmission of the streaming data, the streaming data on the recording medium is disabled from playback (see figure 6, elements 602, 604; and column 10, line 60, through column 11, line 9 of Traw).

However, Traw do not specifically mention disabling the streaming data on the recording medium after transmission.

ii. Severt discloses an apparatus for providing results of electrical tests correlated with location information, where the results file manager deletes the data from the current result location (see column 10, lines 49-56 of Severt).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Severt into the system of Traw to disable the streaming data on the recording medium after transmission.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Severt into the system of Traw to disable the streaming data on the recording medium after transmission, because multimedia application may include materials such as audio, video or graphic elements that are subject to copy-right or contractual restrictions as to use, distribution or the like (see column 1, lines 23-26 of Traw).

Referring to claim 25:

i. Traw teaches:

A streaming data playback apparatus comprising:

a playback circuit which reproduces streaming data from a recording medium (see figure 6; and column 3, lines 42-46; and column 6, lines 40-46 of Traw);

an interface circuit which performs a scramble process on the streaming data reproduced by the playback circuit and adds copy control information to the scrambled streaming data for transmission (see figure 6, element 606 'Channel Cipher Subsystem'; column 10, lines 11-23; column 3, lines 31-32 'CGMS'; and column 5, lines 27-30 of Traw);

wherein the interface circuit establishes a channel to a destination apparatus of the streaming data for transmission of the streaming data (see figure 2, element 210 'Establish full content channel' of Traw);

wherein the interface circuit exchanges key information used for the scramble process and a descramble process with the destination apparatus by performing an authentication process with the destination apparatus (see figure 6, element 604 'Authentication and Key Exchange Subsystem'; and column 11, lines 1-9 of Traw); and

wherein when transmitting the streaming data, the interface circuit disconnects channels other than the channel used for transmitting the streaming data to the destination apparatus (see figure 2, element 212 'Terminate content transfer on preliminary content channel' of Traw).

However, Traw do not specifically mention disabling the streaming data on the recording medium after transmission.

ii. Severt discloses an apparatus for providing results of electrical tests correlated with location information, where the results file manager deletes the data from the current result location (see column 10, lines 49-56 of Severt).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Severt into the system of Traw to disable the streaming data on the recording medium after transmission.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Severt into the system of Traw to disable the streaming data on the recording medium after transmission, because multimedia application may include materials such as audio, video or graphic elements that are subject to copy-right or contractual restrictions as to use, distribution or the like (see column 1, lines 23-26 of Traw).

Referring to claim 26:

Traw and Severt teach the claimed subject matter: A stream data playback apparatus (see claim 25 above). Traw further discloses the interface circuit refuses to authenticate any apparatus which tries to share the key information used in the channel (see figure 6, element 604; and column 9, line 59, through column 10, line 2 of Traw).

Referring to claim 27:

i. Traw teaches:

A streaming data playback apparatus comprising:

a playback circuit which reproduces streaming data from a recording medium (see figure 6; and column 3, lines 42-46; and column 6, lines 40-46 of Traw);

an interface circuit which performs a scramble process on the streaming data reproduced by the playback circuit and adds copy control information to the scrambled streaming data for transmission (see figure 6, element 606 'Channel Cipher Subsystem'; column 10, lines 11-23; column 3, lines 31-32 'CGMS'; and column 5, lines 27-30 of Traw);

wherein the interface circuit establishes a first channel to a first destination apparatus of the streaming data for transmitting the streaming data, and a second channel to a second destination apparatus of the streaming data for transmitting the same streaming data (see e.g. figure 8, elements 'Content Channel A', 'Content Channel B' of Traw);

wherein the interface circuit exchanges first key information used for the scramble process and a descramble process with the first destination apparatus

Art Unit: 2135

by performing an authentication process with the first destination apparatus, and exchanges second key information, different from the first key information, used for the scramble process and the descramble process with the second destination apparatus by performing the authentication process with the second destination apparatus (see figure 6, element 604; and column 9, line 59, through column 10, line 2 of Traw); and

when transmitting the streaming data, the interface circuit adds to the scrambled streaming data on the first channel the copy control information indicating that the transmitted streaming data may be recorded into a recording device, and the interface circuit adds to the scrambled streaming data on the second channel the copy control information indicating that the transmitted streaming data can not be recorded by a recording device, and the streaming data on the recording medium is disabled from playback after the streaming data transmission (see column 10, lines 11-23 of Traw).

However, Traw do not specifically mention disabling the streaming data on the recording medium after transmission.

ii. Severt discloses an apparatus for providing results of electrical tests correlated with location information, where the results file manager deletes the data from the current result location (see column 10, lines 49-56 of Severt).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Severt into the system of Traw to disable the streaming data on the recording medium after transmission.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Severt into the system of Traw to disable the streaming data on the recording medium after transmission, because multimedia application may include materials such as audio, video or graphic elements that are subject to copy-right or contractual restrictions as to use, distribution or the like (see column 1, lines 23-26 of Traw).

Referring to claim 28:

Traw and Severt teach the claimed subject matter: A stream data playback apparatus (see claim 27 above). Traw further discloses the display device (see column 3, line 9 of Traw).

Referring to claim 29:

i. Traw teaches:

A streaming data playback apparatus comprising:

a playback circuit which reproduces streaming data from a recording medium (see figure 6; and column 3, lines 42-46; and column 6, lines 40-46 of Traw);

an interface circuit which performs a scramble process on the streaming data reproduced by the playback circuit and adds copy control information to the scrambled streaming data for transmitting the scrambled streaming data and the copy control information to a recording device (see figure 6, element 606 'Channel Cipher Subsystem'; column 10, lines 11-23; column 3, lines 31-32 'CGMS'; and column 5, lines 27-30 of Traw);

wherein when transmitting the streaming data, the interface circuit changes the copy control information added to the scrambled streaming data depending on a first case that the streaming data is to remain stored on the recording medium after the streaming data transmission and a second case that the streaming data on the recording medium is to be disabled from the streaming data transmission (see column 10, lines 11-23 of Traw).

Traw further discloses the detection and the interruption of the transmission of the stream data (see column 4, lines 62-65 of Traw).

However, Traw do not specifically mention disabling the streaming data on the recording medium after transmission.

ii. Severt discloses an apparatus for providing results of electrical tests correlated with location information, where the results file manager deletes the data from the current result location (see column 10, lines 49-56 of Severt).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Severt into the system of Traw to disable the streaming data on the recording medium after transmission.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Severt into the system of Traw to disable the streaming data on

Art Unit: 2135

the recording medium after transmission, because multimedia application may include materials such as audio, video or graphic elements that are subject to copy-right or contractual restrictions as to use, distribution or the like (see column 1, lines 23-26 of Traw).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) Yokota et al. (U.S. Patent No.: 6,788,604 B2) disclose a recording apparatus for facilitating data erasure operations involving data recorded on a recording medium.

(b) Okuyama et al. (U.S. Patent No.: 6,256,390 B1) disclose a copy flag detecting circuit in a device detects the copy generation management information.

Response to Arguments

6. Applicant's arguments filed on May 2, 2006 have been fully considered but they are not persuasive.

Applicant argues:

"Traw et al. mentions updating copy control information (see column 10, lines 11-23); however, Traw et al. is silent on the relationship between the value of the copy control information and the handling of the original content." (see page 1, Applicant Arguments/Remarks)

Examiner maintains:

Traw et al. first disclose that “CGMS refers to Copy Generation Management System, a well-known format for indicating copy protection status” (see column 3, lines 31-32 of Traw et al., emphasis added).

Traw et al. then disclose that “The source of the content sends a message via the encrypted control channel to the compliant destination device (or devices in the case of a content multicast). This message contains: a randomly generated key which is unique for each stream of content. (K.sub.Content); the symmetric cipher to use (Content_Algo_Select); Cipher initialization state; the Isochronous channel associated with the content stream; Copy Control Information (such as CGMS bits); a sequence number initialized to the least significant 16 bits of A.sub.C and incremented for each additional message sent.” (see column 9, line 59, through column 10, line 2 of Traw et al.). Therefore, Traw et al. disclose the relationship between the value of the copy control information [i.e., copy protection status] and the handling of the original content.

Applicant argues:

“Severt et al. only teaches deletion of the data, presumably at the user’s option.” (see page 2, Applicant Arguments/Remarks)

Examine maintains:

Severt et al. disclose that “The results file manager 216 consists of a number of independent functions. Each function performs a specific operation required by one or more modules in other tester sub-systems. Among the functions performed by the results file manager 216 are: retrieval of current file position pointers, setting of current file position pointers, retrieving and setting current data record, appending new results data to a results file, deleting data from the current result position” (see column 10, lines 49-56 of Severt et al., emphasis added). Therefore, the ‘result file manager’ performs the deletion of the data.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Pan whose telephone number is 571-272-5987.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Joseph Pan
June 30, 2006


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100